

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/092,320	03/06/2002	Jack R. Kries	DP-306837 7500/141	9018	
	7590 09/04/2007 INOLOGIES, INC.	•	EXAM	INER	
Legal Staff	•	WILLIAMS, THOMAS J			
1450 W. Long Lake P.O. BOX 5052, Mail Code: 482-204-450			ART UNIT	PAPER NUMBER	
Troy, MI 48098			3683		
			MAIL DATE	DELIVERY MODE	
			09/04/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	•				
		Application No.	Applicant(s)		
	· • • • • • • • • • • • • • • • • • • •	10/092,320	KRIES ET AL.		
	Office Action Summary	Examiner	Art Unit		
		Thomas J. Williams	3683		
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	orrespondence address		
A SH WHIC - Exte after - If NC - Failu Any	CORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING Dominions of time may be available under the provisions of 37 CFR 1.1. SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period vure to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timwill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status					
1)⊠	Responsive to communication(s) filed on 06 Ju	uly 2007.			
2a)⊠	This action is <b>FINAL</b> . 2b) This action is non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.		
Disposit	ion of Claims				
5)□ 6)⊠ 7)□	Claim(s) 1-18 is/are pending in the application.  4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed.  Claim(s) 1-18 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	wn from consideration.			
Applicati	ion Papers				
9)[	The specification is objected to by the Examine	r.			
10)[	The drawing(s) filed on is/are: a) ☐ acce	epted or b) $\square$ objected to by the ${ t E}$	Examiner.		
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).		
11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex				
Priority ι	under 35 U.S.C. § 119	•			
a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority application from the International Bureausee the attached detailed Office action for a list	s have been received. s have been received in Application rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage		
Attachmen		Λ 🗀 Ιανασία (1991)	(DTO 442)		
2) 🔲 Notic 3) 🔲 Infon	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	te		

Art Unit: 3683

#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-5, 7, 14-16 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,986,510 to Bellamy et al.

Re-claim 1, Bellamy et al. disclose a powertrain mount, comprising: an upper orifice plate 10; a lower orifice plate 9; a generally planer diaphragm 8 with an enlarged central node and a periphery, the central node is in constant contact with the upper orifice plate and the lower orifice plate, the periphery is spaced apart from both the upper orifice plate 10 and the lower orifice plate 9 and is free to move between the upper orifice plate and the lower orifice plate, see figure 3 and column 2 lines 52-55.

Re-claims 2 and 4, the upper orifice plate and lower orifice plate includes a plurality of holes through which fluid may flow, see column 2 lines 34-35.

Re-claims 3, 5, 15 and 16, the holes have a generally circular cross section, as illustrated in the figures. The phrase "generally" is broadly interpreted to include shapes not being perfectly circular. It is noted that circular holes are illustrated throughout the prior art.

Re-claims 7 and 18, the upper 10 and lower 9 orifice plates define an orifice track 7. A portion of plate 10 defines a portion of the orifice track at the fluid connection between orifice track 7 and fluid chamber A.

Re-claim 14, Bellamy et al. disclose a powertrain mount, comprising: an upper orifice plate 10 having a plurality of holes, see figure 2; a lower orifice plate 9 having a plurality of holes, see figure 2; a generally planer diaphragm 8 with an enlarged central node and a periphery, the central node is in constant contact with the upper orifice plate and the lower orifice plate, the periphery is spaced apart from both the upper orifice plate 10 and the lower orifice plate 9 and is free to move between the upper orifice plate and the lower orifice plate, see figure 3 and column 2 lines 52-55.

3. Claims 1-3 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,505,822 to Yamamoto et al.

Re-claim 1, Yamamoto et al. disclose a powertrain mount, comprising: an upper orifice plate 11; a lower orifice plate 12; a generally planer diaphragm 13 with an enlarged central node 33 and a periphery 34, the central node is in constant contact with the upper orifice plate and the lower orifice plate, the periphery is spaced apart from both the upper orifice plate 11, see column 6 lines 43-45 and figure 4, and the lower orifice plate 12 and is free to move between the upper orifice plate and the lower orifice plate, see column 6 lines 43-45.

Re-claims 2 and 3, the upper orifice plate 11 includes a plurality of holes 16 through which fluid may flow, the holes have a generally circular cross-section, see figure 2.

Re-claim 7, the upper and lower orifice plates define an orifice track 9/92.

Application/Control Number: 10/092,320 Page 4

Art Unit: 3683

#### Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. Claims 6, 8-13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bellamy et al. in view of US 5,104,100 to Simuttis.

Re-claims 6 and 17, Bellamy et al. fail to teach the periphery of the diaphragm having a raised rim. Simuttis teaches a powertrain mount having a diaphragm located between an upper orifice plate and a lower orifice plate. In one embodiment the periphery of the diaphragm is free to move between the upper and lower orifice plates and is provided with a raised rim, see figure 4. The raised rim portions will limit axial movement of the peripheral portions, thus modifying the damping characteristics as desired. It would have been obvious to one of ordinary skill in the art to have provided the periphery of the diaphragm of Bellamy et al. with a raised rim portion as

Art Unit: 3683

taught Simuttis, thus providing a means of adjusting the damping characteristics for the mount as warranted.

Re-claim 8, Bellamy et al. teach a powertrain mount, comprising: an upper orifice plate 10; a lower orifice plate 9; a generally planer diaphragm 8 with an enlarged central node and a periphery, the central node is in constant contact with the upper orifice plate and the lower orifice plate, the periphery is spaced apart from both the upper orifice plate 10 and the lower orifice plate 9 and is free to move between the upper orifice plate and the lower orifice plate, see figure 3 and column 2 lines 52-55. However, Bellamy et al. fail to teach the periphery of the diaphragm having a raised rim.

Simuttis teaches a powertrain mount having a diaphragm located between an upper orifice plate and a lower orifice plate. In one embodiment the periphery of the diaphragm is free to move between the upper and lower orifice plates and is provided with a raised rim, see figure 4. It would have been obvious to one of ordinary skill in the art to have provided the periphery of the diaphragm of Bellamy et al. with a raised rim portion as taught Simuttis, thus providing a means of adjusting the damping characteristics for the mount as warranted.

Re-claims 9 and 11, the upper orifice plate and lower orifice plate includes a plurality of holes through which fluid may flow, see Bellamy et al. column 2 lines 34-35.

Re-claims 10 and 12, the holes have a generally circular cross section, as illustrated in the figures of Bellamy et al.

Re-claim 13, the upper 10 and lower 9 orifice plates define an orifice track 7. A portion of plate 10 defines a portion of the orifice track at the fluid connection between orifice track 7 and fluid chamber A, see Bellamy et al.

Application/Control Number: 10/092,320 Page 6

Art Unit: 3683

## Response to Arguments

7. Applicant's arguments filed July 6, 2007 have been fully considered but they are not persuasive. With respect to Bellamy et al., the recitation "a generally planer diaphragm" merely requires the element in question to substantially occupy a single geometric plane, such as a horizontal plane. Clearly, as one can note from figure 2, a single line representing a horizontal plane can be drawn through the entire diaphragm element 8. As such the diaphragm does in fact occupy a single plane and is therefore properly interpreted as a generally planer diaphragm. Furthermore, it is noted that a flexible or elastic disk or partition can constitute a diaphragm, this is consistent with the instant invention, wherein what appears to be nothing more than a disk (60) is disclosed as a diaphragm. As such it appears appropriate for the examiner to interpret disk element 8 as a diaphragm. The claims do not require the diaphragm to be substantially flat, as is apparently argued by the applicant. As such the remarks are more specific than the claim language.

With regards to Yamamoto et al., as is clearly illustrated in figure 4, the periphery is spaced apart from the upper orifice plate. The claims are not specific as to when the periphery is spaced apart from at least one of the upper or lower orifice plates, but only that at some point this situation must exist. As such Yamamoto et al. is believed to anticipate the claim language. Furthermore, the remarks submitted by the Board appear to support this position, see page 13 of the decision mailed December 12, 2006.

#### Conclusion

8. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Application/Control Number: 10/092,320

Art Unit: 3683

Page 7

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

9. Any inquiries concerning this communication or earlier communications from the

examiner should be directed to Thomas Williams whose telephone number is 571-272-7128.

The examiner can normally be reached on Wednesday-Friday from 6:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Robert Siconolfi, can be reached at 571-272-7124. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 571-272-6584.

THOMAS J. WILLIAMS PRIMARY EXAMINER

TJW

August 28, 2007

Thomas Williams

AU 3683

1-29-07